p1029: Combine Like Terms (v19)

Example

Combine like terms.

$$x - 7x^2 - 5 - 8x - 1 + 8 - 9x^2 - 4x^2 - 6x + 9x^2$$

Answer

Combine the quadratic terms.

$$-7x^2 - 9x^2 - 4x^2 + 9x^2 \equiv -11x^2$$

Combine the linear terms.

$$x - 8x - 6x \equiv -13x$$

Combine the constant terms.

$$-5 - 1 + 8 \equiv 2$$

The final result:

$$-11x^2 - 13x + 2$$

Question 1

Combine like terms.

$$7x + 9x^2 - 7 + 4x^2 - 6x + 3x - 3x^2 - 9 + 1 - 4$$

$$10x^2 + 4x - 19$$

Question 2

Combine like terms.

$$-5 - 6x - 9x^2 + x^2 - 7x^2 - x + 6x - 3 - 8 + 9x^2$$

$$-6x^2 - x - 16$$

Question 3

Combine like terms.

$$-2 + 5x^2 - 7 + 7 - 6x - 4x^2 - 9x + x + 6x^2 - 5$$

$$7x^2 - 14x - 7$$

Question 4

Combine like terms.

$$-x^2 + 5x^2 - 5x - 2x - 9 - 3 + 6x + 3x^2 - 4 + 4x^2$$

$$11x^2 - x - 16$$